UNITED STATES DISTRICT COURT DISTRICT OF MINNESOTA

Spineology, Inc.,

v.

Plaintiff,

Case No. 15-cv-180 (JNE/FLN) ORDER

Wright Medical Technology, Inc.,

Defendant.

Spineology, Inc., brought this action against Wright Medical Technology, Inc., for infringement of United States Reissued Patent No. RE42,757 (filed May 7, 2004).

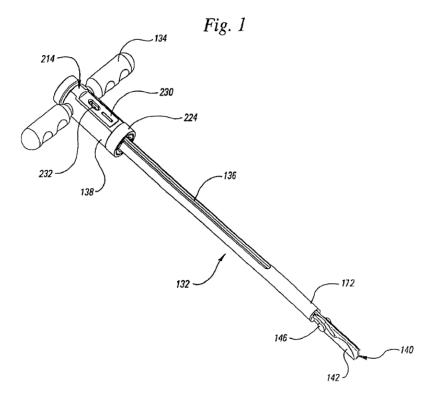
Wright Medical Technology asserted counterclaims for declarations of noninfringement, absolute and equitable intervening rights, and invalidity. The case is before the Court on Spineology's Motion for Summary Judgment, Wright Medical Technology's Motion for Summary Judgment, and Wright Medical Technology's motions to exclude certain opinions of Spineology's experts. For the reasons set forth below, the Court grants Wright Medical Technology's Motion for Summary Judgment and denies the remaining motions.

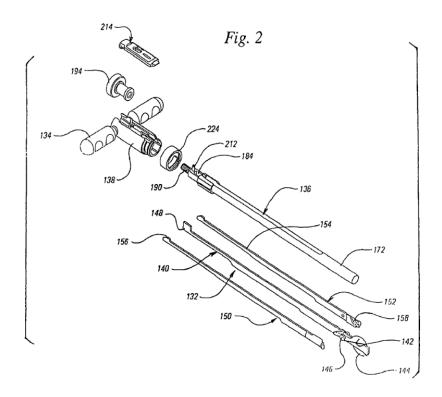
I. BACKGROUND

The invention claimed in the '757 Patent "relates to an expandable reamer for use in surgery, particularly in orthopedic applications." '757 Patent col. 1 ll. 25-26. "The invention provides a surgical tool . . . for forming hollow chambers within bone that are larger in diameter than the external opening into the chamber. The tool has a distal end with external dimensions sized to be passed through the patient's anatomy to a point of

entry into the bone." '757 Patent col.1 ll. 60-64. Retractable blades may "be extended to cut a cavity greater than the diameter of the surgical tool." '757 Patent col. 1 ll. 64-67.

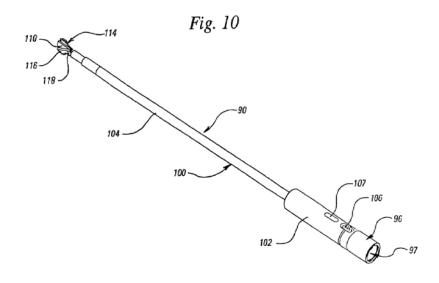
The '757 Patent describes two preferred embodiments. Figures 1 and 2 of the '757 Patent, which appear below, depict one. It includes a hollow main shaft 136 that carries an elongated shaft 140 and blade guides 150 and 152. Blades 142 and 144 are mounted at the distal end of the elongated shaft. The main shaft is attached to a guide member that is inserted into an opening in a blade advancer barrel 138. The end of the guide member includes a threaded shaft 190 that is received within the barrel by a blade advancer knob 194. The guide member includes a pin 212. Observation of the pin within an opening 232 on the barrel's slide door 214 allows a user to track the degree of movement that the shaft makes as the knob is turned. Rotation of the knob causes the main shaft and blade guides to move inwardly or outwardly within the barrel. The

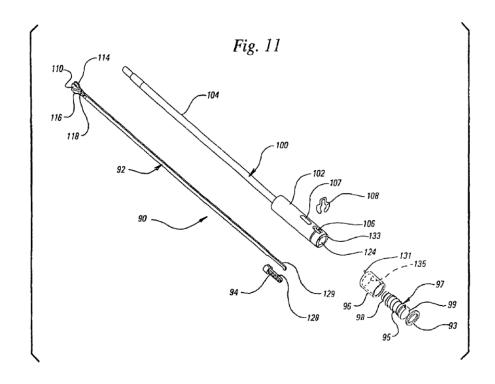




elongated shaft remains stationary. The blades move as their engagement members move within slots 158 on the blade guides. '757 Patent col. 2 1.48 to col. 3 1.61.

Figures 10 and 11 of the '757 Patent display views of the reamer according to an alternative embodiment. "[A]n elongated tube and barrel 100 carry a long rod 92 that





attaches at the proximal end to a turn wheel 96 that moves the blades distally and proximally. The end of the long rod 92 is attached to two like blades by a pivot 118 that allows the blades 114 and 116 to change position." '757 Patent col. 4 ll. 2-7. "The surgeon may visualize the degree the blades 114 and 116 extend by viewing the position of the shaft 92 relative to the barrel 102, through view port 107." '757 Patent col. 6 ll. 49-51. Although figures 10 and 11, as well as figure 13, display the view port 107 on the barrel 102, the written description states that "[t]urn wheel 96 may include depth marking slot 107 which allows the user to see how far the blades have extended or retracted." '757 Patent col. 4 ll. 57-59.

The '757 Patent is a reissue of United States Patent No. 6,383,188 (filed Feb. 13, 2001). There were 14 claims in the '188 Patent. In May 2004, a reissue application was filed. In September 2011, the prosecution of the reissue application concluded with the

issuance of the '757 Patent. Of the '188 Patent's 14 claims, only claim 13 remained in the '757 Patent. Claims 1-12 and 14 were canceled in the course of the prosecution of the reissue application. In addition to claim 13, the '757 Patent contains claims 15-43, which were added during the prosecution of the reissue application.

Spineology asserted that Wright Medical Technology infringes independent claims 15, 33, and 35; claims 21-23, which depend on claim 15; and claim 34, which depends on claim 33. The accused product is Wright Medical Technology's X-Ream percutaneous expandable reamer. The asserted claims appear below. The Court previously determined that "activation mechanism" in claims 15 and 35 is indefinite.

Claim 15

An expandable reamer for use in bone and related tissue in a mammal comprising:

an elongated hollow body having a proximal end and a distal end, sized and configured to engage bone and related tissue in the mammal;

an elongated blade carrier having a proximal end and a distal end, the blade carrier disposed within the body;

a set of blades pivotally attached proximate the distal end of the blade carriers; the set of blades having at least a first retracted position relative to the body, the body having a maximum cross-sectional diameter transverse to a longitudinal axis of the body that is substantially at least as large as a maximum cross-sectional diameter of the blades in the first retracted position, and a second fully expanded position having a diameter greater than the maximum cross-sectional diameter of the body; and

an manually actuated activation mechanism that moves the set of blades from the first retracted position to the second fully expanded position and any expanded position therebetween.

Claim 21

The reamer of claim 15 wherein the blades extend beyond the distal end of the hollow body.

Claim 22

The reamer of claim 15 wherein the blades are pivotally attached at a single pivot point.

Claim 23

The reamer of claim 15 wherein each of the blades includes a cutting portion arranged such that substantially all of the cutting portion is outside the maximum crosssectional diameter of the body when the blades are in the second fully expanded position.

Claim 33

A method for creating a cavity in bone comprising:

drilling a bore in bone,

inserting an expandable reamer into the bore,

manually actuating an activation mechanism of the reamer that engages a blade carrier within the reamer such that linear motion of the blade carrier drives a blade set pivotally attached to the blade carrier from a first retracted position relative to the body, the body having a maximum crosssectional diameter transverse to a longitudinal axis of the body that is substantially at least as large as a maximum cross-sectional diameter of the blades in the retracted position to a second fully expanded position having a diameter greater than the maximum cross-sectional diameter of the body and any expanded position therebetween;

contacting the bone with the blade set in the any expanded position; and rotating the expandable reamer such that the blade set cuts into the bone.

Claim 34

The method of claim 33 wherein the blades extend beyond the distal end of the hollow body.

Claim 35

An expandable reamer for use in bone and related tissue in a mammal comprising:

an elongated hollow body having a proximal end and a distal end sized and configured to engage bone and related tissue in the mammal;

at least one shaft operably arranged in a coaxial relation with the hollow body along a longitudinal axis and having a proximal and a distal end;

a set of blades pivotally attached proximate the distal end of the shaft, the set of blades having at least a first retracted position relative to the body, the body having a maximum cross-sectional diameter transverse to a longitudinal axis of the body that is substantially at least as large as a maximum cross-sectional diameter of the blades in the first retracted position, and a second fully expanded position having a diameter greater than the maximum cross-sectional diameter of the body; and

an manually actuated activation mechanism that moves the set of blades from the first retracted position to the second fully expanded position and any expanded position therebetween.

II. DISCUSSION

A. Motions for summary judgment

Summary judgment is proper "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). To support an assertion that a fact cannot be or is genuinely disputed, a party must cite "to particular parts of materials in the record," show "that the materials cited do not establish the absence or presence of a genuine dispute," or show "that an adverse party cannot produce admissible evidence to support the fact." Fed. R. Civ. P. 56(c)(1)(A)-(B). "The court need consider only the cited materials, but it may consider other materials in the record." Fed. R. Civ. P. 56(c)(3). In determining whether summary judgment is appropriate, a court must view genuinely disputed facts in the light most favorable to the nonmovant, *Ricci v. DeStefano*, 557 U.S. 557, 586 (2009), and draw all justifiable inferences from the evidence in the nonmovant's favor, *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986).

1. Wright Medical Technology's motion

Wright Medical Technology moved for summary judgment of noninfringement of claims 33 and 34 of the '757 Patent. According to Wright Medical Technology, "body" in the '757 Patent refers to a shaft and a barrel. Wright Medical Technology maintained that the X-Ream does not infringe because the diameter of the blades of the X-Ream in their fully expanded position is less than the maximum cross-sectional diameter of the body. According to Spineology, "body" in the '757 Patent refers to a shaft alone. Spineology asserted that the diameter of the blades of the X-Ream in their fully expanded position is greater than the maximum cross-sectional diameter of the body.

An infringement analysis has two steps. First, the court determines the meaning and scope of the claims asserted. *Tinnus Enters., LLC v. Telebrands Corp.*, 846 F.3d 1190, 1203 (Fed. Cir. 2017); *Grober v. Mako Prods., Inc.*, 686 F.3d 1335, 1344 (Fed. Cir. 2012). Second, the court compares the properly construed claims to the allegedly infringing device. *Tinnus Enters.*, 846 F.3d at 1203; *Grober*, 686 F.3d at 1344. Claim construction is a question of law, and infringement is a question of fact. *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1356 (Fed. Cir. 2007).

The Court previously addressed the construction of disputed claim terms, including "body." Spineology asserted that "body" should be construed as "the tube or shaft in which the blade carrier is housed," and Wright Medical Technology maintained that "body" should be construed as "outer structure(s) of the reamer." Later, Wright Medical Technology proposed "outer structure(s) that house internal components." The Court considered the use of "body" in claim 15 and its dependent claims to be illustrative,

found no description of any part of the reamer that used "body" in the written description, summarized the preferred embodiments, assessed the parties' proposed constructions, declined to adopt either party's proposed construction of "body," stated that the claims themselves provide substantial guidance as to the meaning of the term, and discerned no need to construe the term except to state that "body" does not include the blade control knob.

Claim 15 recites "an elongated hollow body" that has "a proximal end and a distal end, sized and configured to engage bone and related tissue in the mammal." The blade carrier is "disposed within the body." A set of blades is "pivotally attached proximate the distal end" of the blade carrier. The set of blades has "a first retracted position relative to the body" and "a second fully expanded position having a diameter greater than the maximum cross-sectional diameter of the body." The body has "a maximum crosssectional diameter transverse to a longitudinal axis of the body that is substantially at least as large as a maximum cross-sectional diameter of the blades in the first retracted position." Claim 16, which depends on claim 15, recites that "the body includes a view port." Claim 17, which depends on claim 15, recites that "the blade carrier is linearly moveable relative to the body and the body includes indicators that indicate a distance that the blade set is extended from the distal end of the body." Claim 18, which depends on claim 15, recites that "the activation mechanism is a moveable cannulated shaft having linear movement along the body." Claim 20, which depends on claim 18, recites that "the activation mechanism is a blade control knob constrained within the proximal end of the body." Claim 21, which depends on claim 15, recites that "the blades extend beyond

the distal end of the hollow body." Claim 23, which depends on claim 15, recites that "each of the blades includes a cutting portion arranged such that substantially all of the cutting portion is outside the maximum cross-sectional diameter of the body when the blades are in the second fully expanded position." The claims that depend on claims 24 and 35 are similar to those that depend on claim 15.

A reading of the claims in the context of the patent reveals that "body" is the hollow structure that houses the blade carrier and that receives a knob or wheel: "body" includes the barrel. See Retractable Techs., Inc. v. Becton, Dickinson & Co., 653 F.3d 1296, 1305 (Fed. Cir. 2011) ("It is axiomatic that the claim construction process entails more than viewing the claim language in isolation. Claim language must always be read in view of the written description . . . "); Nystrom v. TREX Co., 424 F.3d 1136, 1149 (Fed. Cir. 2005) ("The district court erred in not properly applying the principles set forth in our prior precedents that arguments based on drawings not explicitly made to scale in issued patents are unavailing."). In each preferred embodiment, the blade carrier is disposed within an elongated, hollow structure that consists of a tube and a barrel. '757 Patent col. 3 ll. 34-51; '757 Patent col. 4 ll. 2-7 ("[A]n elongated tube and barrel 100 carry a long rod 92 that attaches at the proximal end to a turn wheel 96 that moves the blades distally and proximally."). The view port is on the barrel. '757 Patent col. 3 ll. 34-39 ("Observation of the position of the pin 212 within the confines of opening 232 allows a user to track the degree of movement that the shaft 136 makes longitudinally in response to turning knob 194."); '757 Patent col. 6 ll. 49-51 ("The surgeon may visualize the degree the blades 114 and 116 extend by viewing the position of the shaft 92 relative

to the barrel, through view port 107."). The blade control knob is constrained within the barrel. '757 Patent col. 3 ll. 8-10 ("Blade advancer barrel 138 includes an annular recess 200 to mate with knob lip 202 which rotatably secures the knob lip 194 to the barrel 138."); '757 Patent col. 3 ll. 40-42; '757 Patent col. 5 ll. 3-32.

According to an expert witness retained by Wright Medical Technology, the maximum cross-sectional diameter of the body of the X-Ream is greater than the maximum cross-sectional diameter of the blades of the X-Ream in their fully expanded position. Spineology did not direct the Court to any evidence that raises a genuine issue of material fact. Spineology's infringement position depends on a claim construction that the Court previously declined to adopt and that is inconsistent with the claims and the written description. The Court grants Wright Medical Technology's motion.

In addition to moving for summary judgment of noninfringement of claims 33 and 34, Wright Medical Technology asserted that summary judgment is appropriate to establish that Spineology may not recover damages before Wright Medical Technology received actual notice from Spineology of the '757 Patent and of Spineology's infringement claims. Having concluded that summary judgment of noninfringement is appropriate, the Court need not consider the parties' dispute regarding damages.

2. Spineology's motion

Spineology moved for summary judgment that there has been direct infringement of claims 33 and 34 of the '757 Patent by the use of the X-Ream by an orthopedic surgeon. Spineology asserted that the limitation in claim 33 regarding the diameter of the blades in their second fully expanded position—"a second fully expanded position having

a diameter greater than the maximum cross-sectional diameter of the body"—is satisfied "if the body is construed to be that portion of the X-REAM® shaft that is intended to be inserted into bone, and which would exclude the handle and the barrel." For the reasons set forth above, the Court rejects Spineology's construction. Because there is no evidence in the record that the blades of the X-Ream in their fully expanded position have "a diameter greater than the maximum cross-sectional diameter of the body," the Court denies Spineology's motion.

B. Wright Medical Technology's motions to exclude

Wright Medical Technology moved to exclude certain opinions and testimony of Spineology's expert witnesses. Having concluded that summary judgment in favor of Wright Medical Technology is appropriate, the Court denies as moot Wright Medical Technology's motions to exclude.

C. Claims and counterclaims

Wright Medical Technology asserted that resolution of its motion for summary judgment in its favor disposes of the entire case. Spineology's Complaint contains two counts, one for patent infringement and the other for willful infringement. Wright Medical Technology asserted three counterclaims. In Count I, Wright Medical Technology sought a declaration of noninfringement. In Count II, it sought a declaration of absolute and equitable intervening rights. In Count III, it sought a declaration of invalidity.

The Court previously concluded that the means-plus-function limitations of claims 15 and 35 are indefinite. Thus, claims 15 and 35 are invalid. *See Intellectual Prop. Dev.*,

Inc. v. UA-Columbia Cablevision of Westchester, Inc., 336 F.3d 1308, 1319 (Fed. Cir. 2003). Claims 21, 22, and 23, which depend on claim 15, incorporate the same indefinite limitation of claim 15. They too are invalid. See Ibormeith IP, LLC v. Mercedes-Benz USA, LLC, 732 F.3d 1376, 1378 (Fed. Cir. 2013); Tele-Publishing, Inc. v. Facebook, Inc., 219 F. Supp. 3d 237, 238 n.1 (D. Mass. 2016). For the reasons set forth above, summary judgment of noninfringement of claims 33 and 34 is appropriate. Accordingly, the Court dismisses Spineology's infringement claims. See Lazare Kaplan Int'l, Inc. v. Photoscribe Techs., Inc., 714 F.3d 1289, 1295 (Fed. Cir. 2013) ("[N]o accused products can be found liable for infringement of an invalid claim.").

Having concluded that dismissal of Spineology's infringement claims is appropriate, the Court declines to issue declarations of noninfringement, absolute intervening rights, or equitable intervening rights. The Court dismisses without prejudice Counts I and II of Wright Medical Technology's counterclaims. As to Count III of the counterclaims, the Court declares that claims 15, 21, 22, 23, and 35 of the '757 Patent are invalid. The Court otherwise dismisses without prejudice Count III of Wright Medical Technology's counterclaims. *See Liquid Dynamics Corp. v. Vaughan Co.*, 355 F.3d 1361, 1370-71 (Fed. Cir. 2004) ("A district court judge faced with an invalidity counterclaim challenging a patent that it concludes was not infringed may either hear the claim or dismiss it without prejudice, subject to review only for abuse of discretion.").

III. CONCLUSION

Based on the files, records, and proceedings herein, and for the reasons stated above, IT IS ORDERED THAT:

- 1. Spineology's Motion for Summary Judgment [Docket No. 91] is DENIED.
- 2. Wright Medical Technology's Motion to Exclude Certain Opinions of Spineology, Inc.'s Expert, Mr. John Allen [Docket No. 97] is DENIED.
- 3. Wright Medical Technology's Motion to Exclude Testimony of Spineology, Inc.'s Expert, Dr. Robert Morgan [Docket No. 102] is DENIED.
- 4. Wright Medical Technology's Motion for Summary Judgment [Docket No. 107] is GRANTED.
- 5. Wright Medical Technology's Motion to Exclude Testimony of Spineology, Inc.'s Expert, Dr. Timothy Nantell [Docket No. 111] is DENIED.
- 6. Count I and Count II of Spineology's Complaint are DISMISSED WITH PREJUDICE.
- 7. Count I and Count II of Wright Medical Technology's counterclaims are DISMISSED WITHOUT PREJUDICE.
- 8. Claims 15, 21, 22, 23, and 35 of United States Reissued Patent No. RE42,757 are invalid. Count III of Wright Medical Technology's counterclaims is otherwise DISMISSED WITHOUT PREJUDICE.

LET JUDGMENT BE ENTERED ACCORDINGLY.

Dated: July 25, 2017

s/ Joan N. Ericksen
JOAN N. ERICKSEN
United States District Judge